Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1.   (Previously Presented)   A method for scrambling information bits in a communications system, comprising:

determining a scrambling sequence based on a metric of system time, wherein said determining a scrambling sequence includes determining the metric based on a subinterval of a system time interval of a control channel in which the information bits of a control message are to be transmitted; and

scrambling the information bits of the control message with the determined scrambling sequence in accordance with the metric.

2.   (Canceled)

3.   (Previously Presented)   The method of claim 1, wherein said determining the metric in accordance with the subinterval of the system time interval in which the information bits are to be transmitted comprises:

determining the metric in accordance with a first subinterval of the system time interval.

4.   (Previously Presented)   The method of claim 1, wherein said determining the scrambling sequence in accordance with the metric of system time comprises:

performing mapping of the metric on the scrambling sequence.

5.   (Previously Presented)   The method of claim 1, wherein said scrambling information bits with the scrambling sequence comprises:

performing an exclusive-OR of the information bits with the scrambling sequence.

6.   (Perilously Presented)   A method for unscrambling information bits in a communications system, comprising:

determining an unscrambling sequence based on a metric of system time, wherein said determining an unscrambling sequence includes determining the metric based on a first subinterval of a system time interval of a control channel preceding a second subinterval of the system time interval by a pre-determined number of subintervals, the second subinterval including information bits of a control message transmitted on the control channel to be unscrambled; and

unscrambling the information bits of the control message transmitted on the control channel with the determined unscrambling sequence in accordance with the metric.

7.   (Canceled).

8.   (Previously Presented)   The method as claimed in claim 6, wherein said determining the metric in accordance with a first subinterval of the system time interval preceding a second subinterval of system time interval by a pre-determined number of subintervals comprises:

determining the first subinterval of the system time interval preceding the second. subinterval of the system time interval by one subinterval.

9.   (Previously Presented)   The method as claimed in claim 6, wherein said determining the unscrambling sequence in accordance with the metric comprises:

performing mapping of the metric on the unscrambling sequence.

10.   (Previously Presented)   The method of claim 6, wherein said unscrambling information bits with the scrambling sequence comprises:

performing an exclusive-OR of the information bits with the unscrambling sequence.

11-19. (Canceled).

20. (Currently Amended) An apparatus for scrambling information bits in a communications system, the apparatus comprising:

means for determining a scrambling sequence based on a metric of system time, wherein said determining a scrambling sequence includes determining the metric based on a subinterval of a system time interval of a control channel in which the information bits of a control message are to be transmitted; and

means for [[the]] scrambling the information bits of the control message with the determined scrambling sequence in accordance with the metric.

21. (Canceled).

22. (Previously Presented)   The apparatus of claim 20, wherein said means for determining the metric in accordance with the subinterval of the system time interval in which the information bits are to be transmitted comprises:

means for determining the metric in accordance with a first subinterval of the system time interval.

23. (Previously Presented)   The apparatus of claim 20, wherein said means for determining the scrambling sequence in accordance with a metric of system time comprises:

means for performing mapping of the metric on the scrambling sequence.

24. (Previously Presented)   The apparatus of claim 20, wherein said means for scrambling information bits with the scrambling sequence comprises;

means for performing an exclusive-OR of the information bits with the scrambling sequence.

25. (Previously Presented)   An apparatus for unscrambling information bits in a communications system, the apparatus comprising:

means or determining an unscrambling sequence based on a metric of system time, wherein said determining an unscrambling sequence includes determining the metric based on a

first subinterval of a system time interval of a control channel preceding a second subinterval of the system time interval by a pre-determined number of subintervals, the second subinterval including information bits of a control message transmitted on the control channel to be unscrambled; and

means for unscrambling the information bits of the control message transmitted on the control channel with the determined unscrambling sequence in accordance with the metric.

26. (Canceled).

27. (Previously Presented) The apparatus as claimed in claim 25, wherein said means for determining the metric in accordance with a first subinterval of the system time interval preceding a second subinterval of system time interval by a pre-determined number of subintervals comprises:

means for determining the first subinterval of the system time interval preceding the second subinterval of the system time interval by one subinterval.

28. (Previously Presented) The apparatus as claimed in claim 25, wherein said means for determining the unscrambling sequence in accordance with the metric comprises:

means for performing mapping of the metric on the unscrambling sequence.

29. (Previously Presented) The apparatus of claim 25, wherein said means for unscrambling information bits with the scrambling sequence comprises:

means for performing an exclusive-OR of the information bits with the unscrambling sequence.

30-38. (Canceled).

39.   (Currently Amended) An apparatus for scrambling information bits in a communications system, the apparatus comprising:

    an electronic processor programmed to provide:

        a sequence generator for determining a scrambling sequence based on a metric of system time, wherein the sequence generator determines the metric based on a subinterval of a system time interval of a control channel in which the information bits of a control message are to be transmitted; and

        a scrambler for scrambling the information bits of the control message with the determined scrambling sequence in accordance with the interval of the channel.

40.   (Currently Amended) An apparatus for unscrambling information bits in a communications system, the apparatus comprising:

    an electronic processor programmed to provide:

        a sequence generator for determining an unscrambling sequence based on a first subinterval of a system time interval of a control channel preceding a second subinterval of the system time interval by a predetermined number of subintervals, the second subinterval including information bits of a control message transmitted on the control channel to be unscrambled; and

        an unscrambler for unscrambling the information bits of the control message transmitted on the control channel with the determined unscrambling sequence in accordance with the unscrambling sequence.

41.   (Currently Amended) ~~A computer program product~~ An article, comprising:

    a non-transitory computer-readable medium ~~comprising~~ having stored thereon code executable [[on]] by at least ~~on computer to cause the at least one computer~~ one electronic processor to:

        determine a scrambling sequence based on a metric of system time, wherein said determining a scrambling sequence includes determining the metric based on a subinterval of a system time interval of a control channel in which the information bits of a control message are to be transmitted; and

scramble the information bits of the control message with the determined

scrambling sequence in accordance with the metric.

42.　(Currently Amended) ~~A computer program product~~ An article, comprising:

a non-transitory computer-readable medium ~~comprising~~ having stored thereon code executable [[on]] by at least ~~on computer to cause the at least one computer~~ one electronic processor to:

determine an unscrambling sequence based on a metric of system time, wherein said determining an unscrambling sequence includes determining the metric based on a first subinterval of a system time interval of a control channel preceding a second subinterval of the system time interval by a pre-determined number of subintervals, the second subinterval including information bits of a control message transmitted on the control channel to be unscrambled; and

unscramble the information bits of the control message transmitted on the control channel with the determined unscrambling sequence in accordance with the metric.